CLAIMS

I claim:

1. A restraining gasket for use in a stuffing box assembly when connecting a male pipe portion to a female pipe portion, said restraining gasket comprising:

a) a compressible body having a spigot-facing surface, a radially outward surface, a gland-facing surface, and a gutter positioned at or radially inward of the radially outward surface

b) a locking member, said member having a tooth portion and an embedded body portion, wherein at least a portion of the tooth portion is positioned to engage the male pipe portion.

2. A restraining gasket as in Claim 1, wherein the gutter is positioned between the leading portion of the gasket and a radially outermost area of the locking member.

3. A restraining gasket as in Claim 1, wherein the gutter forms a portion of the exterior contour of the radially outer surface.

4. A restraining gasket as in Claim 3, wherein the radially outer surface includes a compression seat surface and a distortion control surface, said distortion

control surface leading into the gutter and disposed at an angle of between 5 and 20 degrees with reference to a central axis of the gasket.

5. A restraining gasket as in Claim 1, wherein the gutter is a void below the radially outer surface.

6. A restraining gasket as in Claim 1, further comprising a plurality of density regions, wherein said regions are adapted to influence the movement of said locking members.

7. A method of assembling a restrained mechanical joint, comprising the steps of:

a) urging a portion of a gasket into a sealing relationship between a bell and a spigot, and

b) subsequent to step (a), compressing the gasket to at least partially collapse a gutter in the gasket;

c) subsequent to beginning step (b), rotating a locking segment into resistive contact between the bell and the spigot.

8. A method of assembly as in Claim 7, wherein the gutter is a void below the radially outer surface of the gasket.

9. A method of assembly as in Claim 7, wherein the gutter is an annular depression in the radially outer surface of the gasket.

10. A restraining gasket for use in a stuffing box assembly, adapted to change its center of pressure as it deforms in response to compression.

11. The gasket of Claim 10, wherein the change in center of pressure is influenced by a collapsible void or gutter.

12. A gasket as in Claim 10, comprising a locking segment being at least one tooth disposed radially inwardly.

13. A gasket as in Claim 12, wherein said locking segment comprises a plurality of teeth disposed radially inwardly and an area between at least two of said tooth is devoid of gasket material.